



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of: Werner Blohm, Harald Sikora and  
Adrian Beining

Serial No. of Parent Application: 10/008,998

Filing date of Parent Application: December 4, 2001

For: METHOD OF MEASURING THE  
DIAMETER OF AN ELONGATED  
ARTICLE OF A CIRCULAR CROSS  
SECTION

Examiner: Richard A. Rosenberger

Group Art Unit: 2877

Box Amendments  
Assistant Commissioner of Patents  
Washington, D.C. 20231

Docket: 48619/265797

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**RESPONSE**

Honorable Commissioner of Patents and Trademarks  
Washington, D.C. 20231

This response is submitted in response to the Examiner's Action mailed October 23, 2002 ("Examiner's Action"). A petition for three month extension of time to respond is submitted with this paper together with proper payment.

The Examiner's Action continues to ignore relevant parts of the cited references, points made by applicants, and relevant cited authority as it persists in the meritless obviousness rejection. The record shows that Applicants have received short shrift in what is required to carry the Patent Office's burden of establishing a prima facie case of obviousness. They have been required to respond to inadequate and sometimes indecipherable

assertions and purported justification for continued intransigent rejection. Nevertheless, they continue in good faith and patiently to spend considerable effort and money to show why Ring and the French reference cannot and do not add up to a legally sufficient obviousness rejection. Any applicants are entitled to higher quality treatment and service than this. It is beyond time, and the reasons and authority are sound, to withdraw the rejections of pending claims 25-80.

**1. The Examiner's Action Ignores Applicants' Showing That Ring Expressly and in Multiple Places Teaches Away From the French Reference.**

The Examiner's Action continues to reject claims 25-80 as obvious under 35 U.S.C. § 103 (and on no other grounds) in view of the French reference and the Ring patent. Applicants discussed at length in the July 16, 2002 Response ("Response") that Ring does indeed, and expressly, contain verbiage that teaches away from the French reference. Pages 19 and 20 of the Response contain that discussion. They cite to multiple paragraphs of Ring. These expressly reject combining geometrical or light ray based technique such as in the French reference with use of interference patterns as Ring adopts.

Applicants pointed out at pages 19 – 20 of the Response that:

a. Ring expressly recognizes that prior art measuring methods such as the French reference use geometrical (ray) objects as opposed to wave

optics. Ring, column 1, lines 22-23; column 1, lines 26-34 and column 2, lines 21-25.

b. Ring expressly rejected such geometrical techniques because, among other things, they required that precise distances be maintained between the light source, the work piece and the sensor so as to avoid an unfavorable effect on precision if the distances cannot be maintained.

c. Ring rejects such geometrical ray techniques as in the French reference because they require the light sensors to have a high capacity of resolution. Ring, column 1, lines 38-46.

d. Ring rejects the prior art geometrical Ray techniques as in the French reference because unavailability of such sensors in many cases requires mathematical compensation using geometrical techniques and thus detracts from reliability of the measuring results. Ring, column 1, lines 38-46.

e. Accordingly, Ring uses parallel light to avoid having to use geometrical analysis. Ring, column 3, lines 16 - 17.

Quite clearly, Ring expressly teaches away from the geometrical ray approach in multiple ways as specifically shown at pages 19 and 20 of the Response.

The Examiner's Action simply and completely ignores and fails to address any of these express rejections by the Ring patent of the geometric (ray) approach. Instead, the Examiner's Action says "there us [sic] nothing in Ring, et al to indicate that the system will not work with a diverging beam; for instance, Ring, et al doe [sic] not teach that a diverging beam would not

produce the diffraction pattern." Examiner's Action page 8, 7-10. First, as pointed out at length by applicants, Ring does specifically, expressly and on multiple occasions and in multiple places teach away from the geometrical ray approach. Second, the question is not whether Ring teaches that a diverging beam would not produce a diffraction pattern; of course Ring would not teach that since it is not true. However, as cited multiple times by applicants at pages 19 and 20 of the previous Response, Ring expressly rejects **using** a the geometrical (ray) method necessitated by such a diverging beam for several expressly-stated reasons.

The Examiner's Action never comes to grips with the fact that applicants' invention is new and unobvious over Ring and the French reference because it specifically embraces, rather than rejects, a combination of a geometrical approach with an interference pattern approach rather than rejecting the geometrical approach combined with an interference pattern approach. Note that all pending claims contain limitations specifically to: (1) analysis of the light intensity pattern in accordance with Fresnel diffraction theory; and (2) with the assumption that the wave front from the light source is not planar.

The MPEP is clear that it is improper to combine references where the references teach away from the combination. MPEP § 2141.02; 2145. *In re: Grasselli*, 713 F.2d 731, 743, 218 U.S.P.Q. 769, 779 (Fed. Cir. 1983). The obviousness rejection should be withdrawn for this reason alone.

**2. The Examiner's Action Is Still Unable to Point to Anything in Ring or the French Reference that Provides Any Motivation or Suggestion that the Geometrical Ray Approach Should or Could Be Used With Interference Patents.**

Applicants argued at pages 20 and 21 of the Response that neither the French reference or Ring provide any suggestion or motivation to combine a geometrical ray approach with an interference pattern approach. The Examiner's Action simply blows this off.

The Examiner's Action utterly fails to point to any text or drawing in either Ring or the French reference that would provide such motivation or suggestion.

At best, the Examiner's Action contains this unintelligible sentence on page 8:

The combination of the reference is s [sic] simple, direct and straight forward application of the technique taught by the Ring, et al patent in a closely related, clearly analogous apparatus the disclosed intended use of both references in the basic disclosed manner of operation of both.

To the extent this language is intelligible, and applicants do not concede that it is comprehensible to any extent, it completely ignores that level of skill in the art cannot be relied upon to provide the suggestion to combine references. MPEP 2143.01; *Al-Site Corp. v. VSI Int'l, Inc.* 174 F.3d 1308 (508 U.S.P.Q. 2d 1161 (Fed. Cir. 1999).

Again, the Examiner has cited no sentence or portion of either Ring or the French patent, despite applicants repeatedly pointing out this failure to cite any such portion.

Additionally, MPEP 2143.01 makes clear that:

- (a) Where the teachings of the prior art conflict, the Examiner must weigh the suggestive power of each reference;
- (b) The fact that references can be combined or modified is not sufficient to establish *prima facie* obviousness;
- (c) The fact that the claimed invention is within the capabilities of one of ordinary skill in the art is not sufficient by itself to establish *prima facie* obviousness; and
- (d) The proposed modification cannot change the principle of operation of a reference.

The Examiner's Action honors each of these requirements in the breach. As is apparent in the record of this application, Ring itself expressly shows that its teachings are in conflict with the French reference because it specifically rejects the French geometrical ray approach: Read *negative suggestive power*. The Examiner's Action's apparent reliance on the idea that the references *could* be combined or modified or that the claimed invention is within the capabilities of one of ordinary skill in the art, do not establish obviousness, for the reasons in b and c above and MPEP 2143.01.

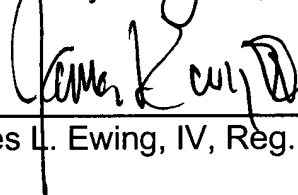
Applicants have shown how proposed modification of the French geometrical ray approach by combining with the Ring approach would change the principles of operation of both, and that Ring specifically rejects the French approach.

For all of these reasons, including the Examiner's complete and utter failure on any occasion to show any portion of Ring or the French patent which provides any suggestion or motivation to combine the geometrical ray approach with the interference pattern approach, the Examiner has failed to establish a prima facie case of obviousness. MPEP § 2143.01; 2145; *Northern Telecom, Inc. v. Data Point Corp.*, 908 F.2d 931, 934 (Fed. Cir. 1990) (affirming district court holding that claims had not been proved invalid as obvious and holding that the patent challenger must present evidence of some teaching, suggestion or incentive supporting a combination of references).

### CONCLUSION

This should be done now and a patent should issue soon.

Respectfully submitted,



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Date: April 23, 2003  
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